

IETA Submission to the UNFCCC

Activities involving removals under the Article 6.4 mechanism including appropriate monitoring, reporting, accounting for removals and crediting periods, addressing reversals, avoidance of leakage, and avoidance of other negative environmental and social impacts, in addition to the activities referred to in chapter V of the rules, modalities and procedure.

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INTRODUCTION

IETA **acknowledges** the efforts by the Parties, the UNFCCC Secretariat, Parties, the Article 6.4 Supervisory Body (A6.4 SB), Observer Organizations and Non-party stakeholders in operationalising the Article 6.4 Mechanism and **welcomes** the request for further stakeholder input on **Activities involving Removals**, including appropriate monitoring, reporting, accounting for removals and crediting periods, addressing reversals, avoidance of leakage, and avoidance of other negative environmental and social impacts, as outlined in decision FCCC/PA/CMA/2022/L.14 para 19-20, following the deliberations during the A6.4-SB003, SBSTA57 and CMA4 in Sharm-el-Sheikh.

The Supervisory Body at A6.4SB-003 noted that more work will need to be undertaken by the Supervisory Body to develop further recommendations and requirements for activities involving removals, including land-based and engineering-based activities.

IETA wishes to reiterate the messages expressed in the submission on the same topic sent to the A6.4 SB on 11 October 2022 with the following additional observations in relation to the topics addressed.

GENERAL COMMENTS

IETA recognises that urgent, large-scale reductions of greenhouse gas emissions remain the priority to tackle climate change and highlights the role of market-based instruments to facilitate such mitigation activities. Simultaneously, IETA recognises the need for adequate accounting and crediting of removal activities, which will have to scale up significantly as the global economy moves towards net-zero. We support the evolution of carbon markets in playing a key role in providing the financing necessary to accelerate such developments.

- To move forward with the process and proceed towards the implementation of removal activities under the Article 6.4 mechanism, IETA believes that there is a need to first develop a set of high-level criteria and safeguards, prior to delving extensively into activity-specific methodological considerations. The most recent Information note released by the Secretariat (A6.4-SB004-AA-A04) appears to be overly prescriptive and does not seem to present a consensus-driven perspective on topics that still require extensive deliberations by Parties and stakeholders.

- In order to avoid unintended limitations of the types of removal activities that will be eligible under Article 6, the A6.4 SB should focus on developing consensus on overarching recommendations that are technology neutral. Such principles can be complemented by specific requirements for each activity type, established through the approval of individual methodologies or through further COP decisions on the eligibility of certain carbon removal types/methods. In this process, the continued engagement of subject matter experts, market participants and other external stakeholders will be critical to ensure the development of appropriate rules and methodologies.
- To better facilitate a constructive dialogue on crediting for removal activities under the Article 6.4 Mechanism, removals should be contextualized within the wider UNFCCC framework. Further discussions need to be held on the role of removals in achieving the goals of the Paris Agreement, the impact of various accounting rules on NDC fulfillment, connection with REDD+ as well as how to account for removals and reductions when both are achieved within the same activity. Developments should also draw from the relevant experiences that guided the treatment of carbon removals by Parties under the Kyoto Protocol, cognisant of evolutions in the knowledge base since then.

Finally, it is important that recommendations are commercially feasible to attract investment from the private sector. In order to significantly scale up removal activities to help us achieve the temperature goals of the Paris Agreement, large amounts of finance need to be channeled from the private sector into both land-based and engineering-based removals in the coming years. This will only come to fruition if rules and methodologies are clear, recommendations are tested and proven by market players, and no undue burden is placed on activity participants. Should the A6.4 SB fail to adopt such rules, removal activities may choose to operate under other crediting programmes instead.

SPECIFIC COMMENTS

1. Scope and definition of removal activities

IETA believes that the definition of removals should be clear and simple to avoid risks pertaining to environmental integrity. Yet, it should remain open for potential methods for carbon dioxide removals still under development. IETA agrees with the proposed definition from the IPCC that “CDR refers to anthropogenic activities removing CO₂ from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products. It includes existing and potential anthropogenic enhancement of biological, geochemical or chemical CO₂ sinks, but excludes natural CO₂ uptake not directly caused by human activities. Considering the limited experience and assessment of removal activities covering other greenhouse gases (GHGs) apart from CO₂, IETA do not see a need to explicitly address those in the definition of removals for the purpose of the Article 6.4 Mechanism, especially where these may risk conflating emission reductions and carbon removals.¹

2. Accounting for removals

To avoid over crediting and risk diminishing the environmental integrity of the Article 6.4 Mechanism, crediting from removals should clearly be defined as the net negative emissions resulting from an activity.

¹ IPCC, 2018: *Special Report: Global Warming of 1.5°C (SR1.5) Annex I: Glossary* [Matthews, J.B.R. (ed.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 541-562.

All methods established under the Article 6.4 mechanism will need to be captured within a robust accounting framework that ensures environmental integrity within the Paris Agreement compliance architecture. A6.4ERs issued to removal activities should be well-aligned with the way in which the same activity is recorded in the national GHG inventory of the host party(ies). A robust accounting framework means that the transfers of A6.4 removal credits between Parties, any related corresponding adjustments, and the stocktake of progress against NDCs, should all seamlessly fit together (e.g. to avoid type I/type II errors that may arise due to methodological inconsistencies). As such, methodologies for carbon removals must be developed cognisant of the recommended approaches in IPCC Guidelines for National GHG Inventory compilation. Appropriate methodological requirements, reporting standards (e.g. requirements for certain higher Tiers to be applied by Parties hosting activities) and/or the use of accounting techniques that can reconcile differences, may all need to be explored to ensure there is consistency in records across issued credits and the reductions and removals recorded by Parties.

3. Boundaries and leakage

IETA notes that the use of adjustment factors is being proposed as a simplified method to account for leakage. However, we also note that there is limited experience with these factors, their use can present opportunities for regulatory arbitrage, and can impact upon the robustness of accounting of transfers against NDCs (see 'Accounting for removals' section above). Even in the case of such uses, any standardized leakage measure should include periodic verification of historic leakage post implementation of projects to ensure a high level of environmental integrity of projects. IETA welcomes a wider dialogue on the potential approaches to manage leakage risks for both land-based and technology-based removal activities.

When it comes to leakage caused by resource competition for technology-based removal activities, IETA recommends this to be reframed in the context of environmental safeguards and green energy procurement guidelines. In order to enable technology-based removal activities to scale up, criteria may require project developers to procure renewable power which allows them to be expanded into power grids where they have optimal climate conditions for generation. This guidance would allow project developers to rely on existing contractual frameworks, developers, and supply chains, and allow for flexibility in environmental accounting for climate-based mitigation systems on a broad yet still auditable scale.

The need to consider the overall GHG effects across the whole lifecycle of some removal activities (e.g. embodied emissions in material usage) may also be an important aspect that warrants deeper consideration.

4. Baselines and additionality

With respect to technology-based removals, such as Direct Air Carbon Capture and Storage (DACCS), the primary purpose is climate mitigation. As such, carbon market investments may be the only source of financing (in conjunction with public finance) available to help scale these technologies to the degree needed to achieve Paris Agreement goals. Due to the current limited availability of other financing sources alongside high cost of these solutions, such projects are likely to be additional.

5. Permanence, liability and addressing reversals

Addressing the risks of reversals and non-permanence for removal activities is a key consideration to maintain and strengthen environmental integrity in the market. Still, certain options discussed by the A6.4SB and proposed by stakeholders such as host Party guarantees for buffers or commercial insurance remain theoretical and require market testing.

The proposal of tonne-year crediting, which is discussed at depth in the information note (A6.4-SB004-AA-A04) has been the subject of consultation and consideration in other crediting programmes, with limited adoption and significant debate over the methodologies used. Unresolved issues include divergence on timeframes, equivalency ratios and discount rates. IETA recommends Parties to consider the experience of the several non-UNFCCC crediting programmes that have been working with removals in the last decade. Considering the increased scrutiny on carbon markets and the need to uphold environmental integrity under Article 6.4, further scientific assessment and empirical evaluation shall be conducted before utilising methodologies based on tonne-year crediting, radiative forcing, and credit discounting, which are currently not common practices in the market. These type of “deploy-and-forget” methodological approaches create a moral hazard problem that will need to be addressed, and will lead to inconsistencies in the way different CDR types are handled.

The use of pooled buffers for the crediting of land-based removals activities has been widely employed in other crediting programmes without the need to apply discount factors, and we propose recommendations should be drawn from those experiences.

For technology-based carbon sink enhancements, IETA welcomes the proposal to adopt the ‘regulatory safeguards’-style approach for geological CO₂ storage, which draws upon approaches previously agreed under the CDM. In addition, IETA has developed a set of principles to govern the development of tradable reductions and removals through the [High-Level Criteria for Carbon Geostorage Activities](#). These include six key core methodological components, as well as ten high-level criteria and supporting safeguards to identify and manage any potential risks associated with carbon geostorage (including reversals).

6. Monitoring

IETA agrees with the view that different monitoring methods may be appropriate for different types of project activities and carbon pools at different temporal and spatial scales. IETA would welcome greater dialogue on the implications of using conservative default factors and adjustments for quantifying carbon stocks, also taking into account how digital MRV systems can improve the accuracy and transparency of measurements. Such methods need to ensure that the environmental integrity of credits remain high, and that approaches support robust accounting against NDCs (see ‘Accounting for removals’ section above).

Recognising that legal and regulatory frameworks for geological CO₂ storage already exists in various jurisdictions, monitoring requirements for geological storage should rely wherever possible on these existing regulatory regimes where such regimes meet agreed minimum requirements. This arrangement can avoid a potentially complex layered structure of domestic legal and Article 6.4 requirements developing.

Monitoring commitments should not be defined as a set number of years but rather be defined as a condition or set of conditions where safe and secure storage can be demonstrated. The monitoring period length should reflect the security of the storage medium chosen for the activity and the risk of potential reversal. As an example, in geologic storage the point at which the CO₂ plume has become predictable and reliably contained in line with reservoir modeling results is an important site closure

condition that must be proved by the storage site operator prior to receiving a site closure ruling. Depending on the site and the circumstances, such a state could be reached in a matter of a few years after injection is complete, or in an extreme case could take hundreds of years.²

7. Avoidance of negative environmental and social impacts

IETA recommends that more consideration be given to this issue in order to keep the Article 6.4 Mechanism aligned with best practices from other programmes. Whilst acknowledging that the enforcement of environmental and social protection laws is a national prerogative of the host Party, it is important to ensure that all activities under the Article 6 Mechanism are aligned with international principles on environmental and social considerations. If a country or region does not have specific guidelines or processes, an impact evaluation before project initiation may be a feasible option. Such evaluation should be verified by a third-party assessor and may lead to the modification or rejection of the project. To strengthen this aspect, an independent and well-defined grievance redress mechanism should be established in accordance with the RMP and remain accessible, robust and with clearly defined scope to do no harm.

² IPCC, 2007: *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.